

Advanced Image Processing (IT507)

Assignment 2

February 4, 2021

1 Instructions

- Implement the following problems in Python or MATLAB.
- **Do not copy code from any source.**
- Prepare a report(one report per group).
- Submit the report (PDF format) in the Google classroom within the deadline.
- The assignments will be evaluated on Monday from 4:30 PM to 6:30 PM.

2 Problems

1. Consider Fig.1 and remove the larger object from the image. *[Hint: Create a mask and apply*

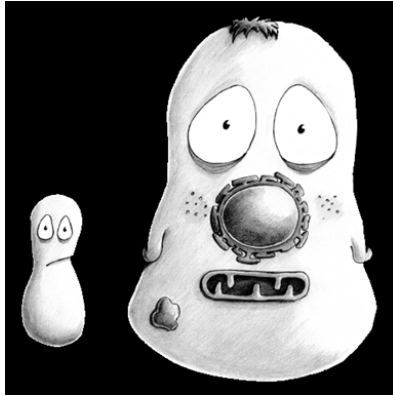


Figure 1

arithmetic operation/.

2. Consider Fig.2, and find out whether a motion has occurred between (a) and (b). *[Hint: Find out the percentage in change in pixels.]*
3. Implement an algorithm to find out the numberplate of Fig.3(a) within the image (Fig. 3(b)). *[Hint: Use the image matching algorithm and find out the normalized cross-correlation for each pixel].*



(a)



(b)

Figure 2



(a)



(b)

Figure 3